PATENT Docket RAL9-99-0181

REMARKS

This amendment is in response to the Office Action mailed December 18, 2002.

The Examiner objects to pages 5 and 14 of the specification. In response, the pages are corrected by changing "2488.32 Gbps" on page 5 to "2488.32 Mbps". The grammatical error referred to by the Examiner on page 14 is also corrected.

The Examiner raised several objections to claims 1-12 under item 5 of the Office Action. Applicants have reviewed the rejection in detail and have corrected all except the objections to claim 4, lines 2-3, and claim 10, lines 2-3. In both cases the Examiner states: "Due to constraints stemming from" is incorrect. Applicants have reviewed this phrase and cannot find any reason why the Examiner reached this conclusion. It would be more productive if the Examiner has identified what in his opinion is wrong with this phrase. Since applicants did not find any problem with the phrase, it remains as is. In the event the Examiner still believes that there is some problem with this phrase applicants respectfully request the Examiner particularly points out the problem and applicants will make necessary adjustments when the error condition is made clear.

Claims 1, 3-5, 7 and 9-11 are rejected under 35 USC 103 as being unpatentable over Kim et al. (IEEE, August 1999) in view of Rostoker et al. (US Patent 6,470,482) and further in view of Koziotis et al. (IEEE, October 1999). Regarding claim 1, the Examiner seems to argue Kim teaches a computer based system comprising means for developing an accurate customizable model that offers sufficient parameters which can be programmed to represent framers from different vendors (page 26, column 1, paragraph 3). The Examiner admits that Kim does not teach the computer based system comprising

PATENT Docket RAL9-99-0181

SERIAL NO. 09/505,748 Amendment dated April 17, 2003 Reply to Office Action of Dec. 18, 2002

means for developing an accurate customizable behavioral model that offers sufficient parameters which can be programmed to represent framers from different vendors. For this teaching the Examiner relies on Rostoker (US Patent 6,470,482). The Examiner further admits that Kim does not teach computer based system comprising means for providing two independently configurable components a receiver and a transmitter and which provide for testing with the framers from multiple vendors by changing programmable parameters of the module. For this teaching the Examiner relies on Koziotis et al. The Examiner then concluded that it would have been obvious to combine the three references in a way to make applicants' claim obvious. The motivations set forth by the Examiner are rather complex and in applicants' view do not meet the requirement for forming a combination by an artisan.

For reasons set forth below applicants respectfully disagree with the Examiner and argue that the Examiner's combination would not render applicants' claim obvious.

A. EXAMINER ERRED IN CONSTRUING REFERENCES

Regarding the Kim et al. article the Examiner states "Kim teaches the computer based system comprising means for developing an accurate customized model that offers sufficient parameters which can be programmed to represent framers from different vendors.

Applicants respectfully argue that this feature does not appear to be disclosed in Kim. In particular, Kim does not disclose a customized model that offers sufficient parameters which can be programmed to represent framers from different vendors. Applicants direct the Examiner to page 26 of the article and section 2.2 Simulation, in

PATENT Docket RAL9-99-0181

particular. In that portion of the article the authors are concerned with the difficulty of simulation associated with the PCI bus. Furthermore, the article states: "Since the SDH framer was a schematic design it was omitted in the VDL simulation but a pseudo VDL model was substituted for loopback simulation". It is applicants' contention that this language clearly specifies that an SDL framer was not simulated as is done in applicants' claim.

In fact, this article teaches away from applicants' invention and an artisan viewing it would not form the combination because the article specifically states that the SDH framer was not part of the simulation whereas the framer is an element in applicants' claim. How could Kim et al. reference teach "... sufficient parameters which can be programmed for framers from different vendors" when it specifically states that SDH Framer was omitted in VHDL simulation. It is applicants' contention that the feature of simulation for the framer is not disclosed in Kim. Therefore, this article would not suggest applicants' claim to an artisan.

Regarding U.S. Patent No. 6,470,482 (Rostoker et al.) the Examiner contends that it teaches computer based system comprising means for developing an accurate customizable behavioral model that offers sufficient parameters which can be programmed to represent framers from different vendors. Applicants respectfully disagree with the Examiner and argue instead that the subject patent seems to teach how to use the model rather than how to design the model as claimed in applicants' invention. Certainly in this reference there is no teaching of "... offering sufficient parameters which can be programmed to represent framers from different vendors".

Regarding Koziotis et al. it is the Examiner's contention that Kim et al. does not

PATENT Docket RAL9-99-0181

SERIAL NO. 09/505,748 Amendment dated April 17, 2003 Reply to Office Action of Dec. 18, 2002

teach the computer based system comprising means for providing two independently configurable components, a receiver and a transmitter, and which provide for testing with framers from multiple vendors. The Examiner seems to rely on Koziotis for teaching this feature of applicants' claim. Applicants maintain that this reference appears inappropriate in that it describes a physical ASIC rather than a simulator as is set forth in applicants' claim. The reason that the Examiner gives as to why an artisan viewing these references would combine the teachings in Koziotis with that of Kim et al. is rather complex and does not seem to satisfy the requirement for an artisan to form a combination based upon suggestions in one of the references.

B. COMBINATION DOES NOT SUGGEST CLAIMED INVENTION

Even after the Examiner's combination it is applicants' contention that the combined references do not suggest applicants' claimed invention. As argued above and incorporated herein by reference the teaching with the Examiner attributes to each of the references does not appear to be present in them. Therefore, when the Examiner combines these references the resultant would not teach features of applicants' invention. In particular, the feature of being able to provide sufficient parameters in the behavioral model to enable programming to represent framers from different vendors is not suggested in the Examiner's combination. As a consequence the combination would not suggest or render applicants' claim obvious.

C. THE COMBINATION IS IMPROPER

It is applicants' contention that the Examiner's combination is improper in that there is no suggestion or motivation in any of the references as to how to combine the teachings

PATENT Docket RAL9-99-0181

from each of the references. Therefore, even assuming that each of the elements that the Examiner suggests is present in each of the references the combination would still be improper; because none of the references suggest a motivation for the combination. In fact, and as pointed out above, the main reference Kim et al. teaches away from applicants' invention in that it suggests that the framer is not part of the simulation whereas in applicants' invention the framer is part of the claimed invention. The fact that one of the references teaches away from applicants' invention is sufficient indication that an artisan viewing the teachings of these references would not form the combination which the Examiner suggests.

Moreover, it is settled law that in order to pick and choose elements from different references to form a combination that renders the claimed invention obvious there must be some suggestion or motivation for forming the combination, set forth in one of the prior art references. As argued above there is no such suggestion; therefore, the combination is improper. It is noted, the Examiner providing logical and concrete reasons why an artisan viewing the references would form a combination that renders the claim obvious would suffice for lack of such teaching in one of the references. However, the Examiner has not set forth any concrete or logical reasons why an artisan would form the combination. Instead, the Examiner relies on excerpts from the references which are tied to the reasons in support of inventions in those references rather than motivation to combine. For example, with respect to Rostoker et al. reference the Examiner cites column 4/lines 19-21 which reads in part "behavioral model provides simplified model of extreme complicated devices". This statement does not seem to suggest a motivation to combine. Instead, it suggests why Rostoker et al. suggests a model be used as an input into their CAD system which uses a model to generate the physical circuit implementation.

¹An assumption with which applicants disagree.

PATENT Docket RAL9-99-0181

SERIAL NO. 09/505,748 Amendment dated April 17, 2003 Reply to Office Action of Dec. 18, 2002

It is applicants' contention that the different structure and method suggested in applicants' claim together with benefits set forth in the application are also evidence of unobviousness.

The Examiner has applied each of the above references to each of the other claims in items 9.2 through 10.2 of the Office Action. However, the fact that key elements in applicants' claim are not present in the references cited by the Examiner or there is no basis for the combination then the distinction between applicants' claims are so clear that further addressing each and every one of the rejections of the Examiner is not warranted.

Claims 6 and 12 are rejected under 35 USC 103(a) as being unpatentable over Kim et al. in view of Rostoker et al. (U.S. Patent 6,470,482), Koziotis et al. and Baghert et al. and further in view of Zwan et al. (U.S. Patent 5,991,270), Vogel (U.S. Patent 6,075,788) and Platt (U.S. Patent 5,802,073).

Applicants would like to point out that this rejection appears cumulative in that the new art which the Examiner adds does not compensate for the shortcomings of the references discussed above. Because claims 6 and 12 are dependent upon claims which applicants argue are patentable over the above cited references then the combination of these references would only be applicable if the deficiency argued above is found in the newly cited references. It is applicants' contention that the newly cited reference does not disclose the feature mentioned above as distinguishing over the art of record. This being the case, these references are merely cumulative and do not suggest applicants' invention. As a consequence, claims 6 and 12 are clearly patentable over the art of record.

It is believed that the present amendment answers all the issues raised by the

PATENT Docket RAL9-99-0181

Examiner. Reconsideration is hereby requested and an early allowance of all the claims is solicited.

Respectfully submitted,

Joselyn G. Cockburn

Reg. No. 27,069 Attorney of Record

JGC:ko

Phone: 919-543-9036 / FAX: 919-254-2649